

REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER 91-095
(AMENDING ORDER 91-016)

REVISED SITE CLEANUP REQUIREMENTS FOR:

RHONE-POULENC, INCORPORATED, AND
SANDOZ CROP PROTECTION CORPORATION

FOR THE SITE LOCATED AT:

1990 BAY ROAD, EAST PALO ALTO
SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. SITE BACKGROUND Site Cleanup Requirements Order 91-016 was adopted in February, 1991, requiring the dischargers, Rhone Poulenc, Incorporated (RPI) and Sandoz Crop Protection Corporation (SCPC), to prepare and submit Feasibility Studies and Remedial Action Plans for the 1990 Bay Road Site. The Order also required the dischargers to submit an Early Action Removal Plan for removal of arsenic contaminated soils. The Early Action Removal Plan was submitted on April 30, 1991.
2. DEMONSTRATED NEED FOR REMOVAL Under CERCLA, early action removal can occur where there is a substantial threat of release of hazardous substances to the environment, or where such a release may pose a substantial and imminent threat to the public health and welfare. Although there is no current public exposure to chemicals present at the site, an early action removal for soil is considered necessary to reduce the potential threat to the environment posed by surface migration of arsenic from areas of high concentration to areas of low concentration, to reduce the overall volume of contamination at the site, and to allow for a more complete final site cleanup.

This removal is a time critical action which allows offsite disposal of soils containing high concentrations of arsenic before RCRA Land Disposal Restrictions (LDRs) become effective in May of 1992. This action is an integral part of the final cleanup measures which shall include onsite treatment of arsenic polluted soils that remain in place.

Soil stabilization has been identified for this site as the most feasible technology for treatment of arsenic polluted soil up to moderate concentrations. If early removal does not occur, it may not be feasible to sufficiently reduce high arsenic concentrations in soils with soil stabilization so as to not be a threat to public health or the environment, or to comply with LDRs for future soil disposal.

3. RECENT INVESTIGATIONS Since adoption of Order 91-016 RPI has submitted results of treatability studies which have determined the effectiveness of soil stabilization technology and fixation reagents in reducing the leachability of arsenic in soils as a final remedy. These studies also were the basis for determining if an early action removal should be undertaken and the extent to which soils should be removed based on arsenic concentrations. As part of the ongoing investigations, annual groundwater monitoring is performed. In addition the ecological assessment of the wetlands portion of the site is continuing.
4. EARLY REMOVAL PROPOSAL The dischargers have submitted a proposal for an early action soil removal pursuant to Provision C.1.e. of Order 91-016. Staff have reviewed the proposal and, with proposed modifications, concur with it. The proposal calls for removal of all accessible soils with arsenic concentrations greater than 5000 ppm. Inaccessible soils with high arsenic concentrations will remain in areas beneath existing structures and facilities and will be addressed in the Uplands Feasibility Study and Remedial Action Plan to be submitted on July 31, 1991.

The proposed arsenic removal concentration level was based on results of treatability studies which evaluated effectiveness of soil stabilization. Soil stabilization technology adds an additive to soil, in situ or ex situ, to physically or chemically fix (reduce mobility of) pollutants in the soil. The study analyzed several soil samples from the site containing 245 ppm to 8000 ppm of arsenic which were treated with a silicate stabilization material in order to reduce leachability. From the results it appears that all soils within the range tested were effectively treated. Using these results a final concentration of 5000 ppm was proposed in order to achieve a more complete final cleanup. A more detailed discussion of the early action removal is contained in the Staff Report in Appendix B.

5. SCOPE OF THIS ORDER This Tentative Order amends Order 91-016 by incorporating the approved Early Action Removal Plan and related tasks into Order 91-016.
6. The dischargers have caused or permitted, and threaten to cause or permit, waste to be discharged or deposited where it

is or probably will be discharged to waters of the State and create or threaten to create a condition of pollution or nuisance as defined in Section 13050(m) of the California Water Code.

7. This action is an order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of CEQA pursuant to Section 15321 of the Resources Agency Guidelines.
8. The Board staff has notified the dischargers and interested agencies and persons of its intent under California Water Code Section 13304 to amend Site Cleanup Requirements for the discharge and has provided them with the opportunity for a public hearing and an opportunity to submit their written views and recommendations.
9. The Board, in a public meeting, heard and considered all comments pertaining to this amendment. The Board has consulted the National Oceanic and Atmospheric Administration, EPA, DOHS, U. S. Fish & Wildlife Service, the U. S. Army Corps of Engineers, the Bay Area Air Quality Management District, the California Fish & Game Department, and the San Francisco Bay Conservation and Development Commission prior to issuing this order and has considered those comments submitted by them and other interested parties.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the dischargers, their agents, successors and assigns, shall cleanup and abate the effects described in the above findings as follows:

A. AMENDMENTS Order 91-016 shall be amended by the addition of the following:

1. NEW TASK: CONSTRUCTION PLAN AND SCHEDULE
DUE DATE: August 15, 1991

Description: RPI shall submit technical reports acceptable to the Executive Officer containing all design plans and detailed schedules for the removal action.

2. NEW TASK: ACTION SPECIFIC HEALTH AND SAFETY PLAN ADDENDUM
DUE DATE: August 15, 1991

Description: RPI shall submit an addendum to the revised Health and Safety Plan submitted April 5, 1991, acceptable to the Executive Officer, to address the early action removal. The plan shall address safety procedures for all personnel as well as decontamination procedures for personnel and equipment; planned location and monitoring procedures for air monitoring stations as well as an action level for air

pollutants; and a contingency response plan.

3. NEW TASK: ACTION SPECIFIC FIELD SAMPLING PLAN
DUE DATE: August 15, 1991

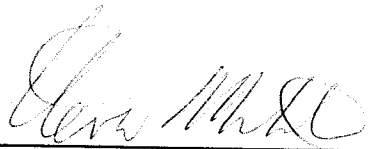
Description: RPI shall submit a field sampling plan acceptable to the Executive Officer. The report shall include all previous and proposed soil borings which shall be used to determine extent of excavations as well as depths of borings.

4. NEW TASK: IMPLEMENTATION REPORT FOR EARLY ACTION SOIL REMOVAL
DUE DATE: November 1, 1991

Description: RPI shall submit a technical report acceptable to the Executive Officer summarizing the removal action. The report shall include all pre- and post-excavation soil sampling as well as air monitoring results. The report shall discuss any construction or other procedures which were modified. The report shall also evaluate if field conditions varied from what was anticipated and if other pollutants were encountered and how they were handled.

5. Pursuant to Water Code Section 13304(c), the discharger are hereby notified that the Board is entitled to and may seek reimbursement for all reasonable staff oversight costs incurred relating to cleanup of wastes on this site, abating the effects thereof, or taking other remedial action.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 19, 1991.



Steven R. Ritchie
Executive Officer